



February 13, 2008

Mr. Michael Adackapara  
Division Chief  
Santa Ana Regional Water Quality Control Board  
3737 Main Street, Suite 500,  
Riverside, California 92501-3348

**RE: Comments on Tentative Order No. R8-2008-0030**

Dear Mr. Adackapara,

Thank you for accepting these comments on Tentative Order No. R8-2008-0030. There are commendable improvements in direction in the draft permit, notably the emphasis on low impact development (LID) and hydromodification. However, refinement of sections containing these new requirements is needed. In particular, reliance on a 5% Effective Impervious Area (EIA) standard to be applied on a site by site basis is inappropriate and without associated runoff reduction standards is likely to be counterproductive. Although the 5% EIA standard has been called a measurable performance standard it is more accurately described as a prescriptive site design criteria. Unfortunately this design criterion can be applied in lieu of actual treatment or runoff reduction standards in this permit. The water quality benefits of applying a 5% EIA standard on a site by site basis are unknown, and this standard should not be considered to provide adequate protection.

Rather than recounting the potential pitfalls of including this standard in the permit, and in the interest of brevity, I wish express my support for the approach outlined in the January 2009 white paper entitled "Low Impact Development Metrics in Stormwater Permitting" which has been circulated to the Board and permittees. In particular, the paper emphasizes the need for a measurable LID BMP performance standard which it defines as the difference between the pre-development and post-development runoff volume resulting from the water quality design storm event. This is a clear standard that will substantially mitigate hydromodification effects as well.

While control of the entire water quality event with LID BMPs will not be feasible on all sites, the alternatives proposed in the report provide sufficient off-ramps for those projects where site constraints limit their use. In particular, the proposed reductions in the LID design runoff volume for infill and redevelopment projects are important incentives that will encourage development in these areas.

The move toward on-site retention and beneficial reuse of stormwater is a critical part of a sustainable stormwater management strategy and also has well documented water supply and energy benefits. The approach outlined in the LID metrics paper makes important progress toward requiring that LID BMPs are given adequate consideration on all sites. However, there are additional components of the program that are given limited attention either in the paper or in the

[www.contechstormwater.com](http://www.contechstormwater.com)





report. Specifically water quality treatment and LID BMP inspection and maintenance requirements are not well developed.

Any BMP that removes pollutants must be maintained periodically to remove those accumulated pollutants. This requires regular inspection of those BMP processes that are relied upon to provide treatment or hydrologic control. For example, the infiltration rate of infiltration BMPs should periodically be investigated, and regeneration of the infiltrating surface should be scheduled when that infiltration rate drops below the initial design rate. In the draft permit, it is not clear that this kind of ongoing inspection and maintenance is required for LID BMPs. Sections XII.F-I only apply to "structural treatment controls". It is unclear if this category includes the pervious areas that are intended to reduce the EIA of the site or LID BMPs. All BMPs with a water quality or quantity control function should be subject to the requirements of sections XII.F-I.

Post construction treatment controls are addressed directly in section XII.C.3 of the permit which states that "pollutants in post-development runoff shall be reduced using controls that utilize best management practices." There is no guidance regarding which BMPs should be selected or what level of performance those BMPs must provide. This standard is clearly inadequate.

Minimum BMP based treatment requirements should be included in the permit to ensure that effective reduction of pollutants is provided prior to discharge of runoff. The current permit and companion Drainage Area Management Plan (DAMP) include the requirement to treat primary pollutants of concern with BMPs that "have been shown to have either medium or high effectiveness" (DAMP Page 7.II-36). DAMP Tables 7-II-2 and 7-II-6 are provided to guide the selection of pollutants of concern and those BMPs that are appropriate for their treatment. This process of identifying pollutants of concern and matching the unit processes inherent in specific BMPs to those pollutants is important, but it is not specifically required by the current permit.

My expectation is that a new and significantly improved draft of this permit will be released at a future date that reflects careful consideration of comments received on the current draft. The changes needed, especially modification or removal of the 5% effective impervious area standard, are substantial and have implications in other sections of the permit. Therefore, I will reserve comments on other issues in anticipation of a revised draft. In the mean time, please contact me if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Vaikko P. Allen II".

Vaikko P. Allen II, CPSWQ, LEED-AP  
Regional Regulatory Manager  
CONTECH Stormwater Solutions, Inc.  
[allenv@contech-cpi.com](mailto:allenv@contech-cpi.com)  
Phone: 805-485-0154

[www.contechstormwater.com](http://www.contechstormwater.com)

